meridian

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Submissions
Electricity Authority
By email: submissions@ea.govt.nz

Review of distributed generation pricing principles – Consultation Paper

Meridian supports the Authority's proposal to remove the distributed generation pricing principles from Part 6 of the Electricity Industry Participation Code 2010 (the Code). Avoided Cost of Transmission (ACOT) payments are a subsidy provided to distributed generation (DG) that in most cases is not for the long-term benefit of consumers and cannot be justified on any principled basis. It is important the Authority acts now to reform what are in essence high cost arrangements for consumers.

Meridian currently receives ACOT payments for our White Hill, Te Uku, and Mill Creek wind farms. In contrast we receive no ACOT payments for our wind farms that connect directly to the grid – West Wind and Te Apiti (despite the former being located immediately adjacent to Mill Creek). There is no principled basis for this difference in treatment which is based purely on whether a wind farm is connected to the grid or embedded. Distributed generation and directly grid connected generation are no different in the way they impact positively or negatively on the transmission system. There are many examples where generation connected directly to the grid avoids the need for transmission investment. As the impact of distributed generation and directly connected generation on the transmission system is essentially the same it makes no sense for the former to have a general entitlement to ACOT payments while the latter does not.

White Hill, Te Uku and Mill Creek are respectively located in the Southland, Waikato, and Wellington regions. All pre-date the Authority's distribution pricing principles (DGPP) review.[1] Despite this Meridian has never assumed the indefinite continuation of ACOT payments for any of these wind farms. Our planning took into account the possibility of ACOT payments, but like any other part of the Code we have always known that it could

[1] Fully operational as of 2007, White Hill is the oldest of these investments. Te Uku and Mill Creek were confirmed by Meridian's Board in October 2009, and June 2012, respectively.

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change. Indeed, our contractual agreements with distributors all anticipate the possibility of regulatory change of the type proposed in respect of ACOT and allow for payments to be adjusted or removed in those circumstances.

With ACOT payments estimated as of 2013/14 to be in the region of $60 million annually, or three times the annual amounts from 2007/08, it is appropriate and entirely predictable that the Authority is taking action now to consider current DG arrangements. We agree with the Authority that consumers are funding a subsidy for DG that over signals the value of DG and encourages inefficiently high levels of DG investment.

Meridian shares the Authority's view that it has a clear mandate to act on changes that can reasonably be expected to support its statutory objectives[2] and that, ultimately, it is the Authority's ongoing commitment to those objectives that matters most to investor and market confidence. As Professor Stephen Littlechild advises in his report on transmission pricing reforms, "Regulatory authorities can be expected to keep a wide range of investigations under review, and from time to time act on these."[3] To do otherwise may itself increase regulatory uncertainty.[4] NERA's TPM report provides further specific arguments for why there is no reason for TPM reform to be delayed or affected by concerns about changes to the way that ACOT operates.[5]

Meridian agrees with the paper's central premise – that is, that current arrangements, in essence, over signal the benefits of DG in reducing costs of transmission. This is due to the combined effect of:

- Deficiencies of underlying regional coincident peak demand (RCPD) methodologies in approximating actual benefits of DG, as the RCPD charge may not reflect any actual or potential transmission constraints, or transmission cost savings.
- Administration of payments by distributors that:
    - are constrained in their ability to assess grid-level cost savings, on an individualised basis; and
    - have little incentive to fully scrutinise ACOT payments due to their ability to recover them in full from consumers.

[2] We note that the DGPPs, while initially part of separate regulations, are now part of the Code and therefore subject to normal processes for Code amendment.
[3] 26 July 2016 Stephen Littlechild 'Report on the Electricity Authority's Transmission Pricing Methodology Review', paragraph 54.
[4] Refer paragraph 48 of the Littlechild report
[5] 26 July 2016 NERA 'Transmission pricing methodology review of second issues paper' report, section 9.

The inefficiencies this creates are further exacerbated by the current incremental cost ‘limit’ on DG connection charges.

Like the Authority, Meridian considers material improvements in efficiency can be achieved from reform and we support the Authority’s proposals to (a) revoke existing DG pricing principles and (b) introduce a new, Transpower-administered system of payments targeting genuine transmission cost savings. This new system should allow for broad recognition of the ways transmission costs can be avoided i.e. not just through reduction in the levels of required energy transmission capacity but also through provision of voltage and reactive support. The Authority’s consultation document appears to take this view[6], but it would useful for this to be reinforced by the Authority in its decision paper.

Meridian also supports the proposal to phase in the ACOT reforms in two parts, commencing 1 April 2017, to enable, as far as possible, early benefits to be obtained.

Appendix A provides Meridian’s responses to specific consultation questions.

Please contact me if you have any questions relating to this submission.

Yours sincerely,

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[6] Paragraph 2.3.1 (b) in particular, which acknowledges the potential for services like voltage support to reduce or defer investments and/or operating costs.

Appendix A Responses to consultation questions

	Question	Response
1.	Do you consider that the proposed Code amendment described in section 4.1 is preferable to the status quo and the alternatives described in section 4.6? If not, please explain your preferred option(s) in terms consistent with the Authority's statutory objective.	Yes. As we have previously submitted, Meridian shares the Authority's concerns that current ACOT arrangements have not had any discernible effect on transmission or distribution investments nor otherwise reduced network costs, in an effective and efficient way.[7] In Meridian's experience, the location of DG is determined by the availability of an appropriate site and resources, rather than where it might reduce the need for future transmission or distribution investments. As noted by the Authority, the RCPD-based charges in the current TPM do not send a locational signal to encourage DG investment in areas of highest potential benefit.[8] Meridian does not dispute that there are examples of DG-induced benefits to the operation of the grid. Indeed, we consider reactive support from Mill Creek as one such example. Like the Authority, however, we do not believe that existing arrangements support <u>overall</u> efficiency of asset choices and investments. Having payments administered by distributors that are constrained in their ability to assess the likely extent of actual transmission cost savings and who have little incentive to fully scrutinise payments (due to full cost recovery from consumers) has compromised the efficiency of outcomes from the current arrangements. Furthermore, the "transmission charges avoided" is not a good proxy for the likelihood and value of avoiding future transmission or distribution investments as a result of the DG. We agree with the Authority's assessment that material efficiency benefits can be achieved through reform. In terms of the 'incremental cost' element of the Authority's proposal, Meridian agrees that there will be efficiency benefits from reform. Artificially capping connection charges to incremental cost for all DG means that such charges are unlikely to be efficient or durable. As the paper suggests, distribution pricing principles – including to promote signalling of economic costs – will support the change proposed. Meridian supports the proposed amendment as it: • Addresses inefficiencies in the current ACOT and DG connection charging arrangements. • Avoids general regulatory uncertainty, caused by the Authority diverging from its principal objectives. • Allows parties the ability to secure (through Transpower) alternative forms of payment where genuine cost savings can be achieved.

[7] Refer 31 January 2014 '*avoided cost of transmission working paper*' Meridian submission, available: https://www.ea.govt.nz/dmsdocument/17083.

[8] As illustrated by analysis from the Authority's '*Transmission Pricing: Second Issues Paper*', showing, for instance, the disparities in charges for areas located some distance from generation (the upper North Island, for instance) vs. areas of high generation (Taranaki, for instance).

	Question	Response
1	Do you consider that the proposed Code amendment described in section 4.1 is preferable to the status quo and the alternatives described in section 4.6? If not, please explain your preferred option(s) in terms consistent with the Authority's statutory objective (cont.)	• Ensures consistent treatment between DG, other distribution network customers and grid-connected forms of generation, and consistency with the Authority's 'technology-neutral' stance[9]. • Permits the use of an Area of Benefit (AoB) method of cost allocation and recovery (unlike the 'Transpower approval' alternative considered in the paper). • Is a proportionate response (unlike the 'Ban on ACOT' alternative considered in the paper). In Meridian's view, the new Transpower process should allow for broad recognition of the way transmission costs can be avoided – whether through reducing required levels of energy transmission capacity or through the provision of voltage and reactive support. Paragraph 2.3.1(b) of the Authority's paper appears to support this view, however, it would be useful to have this clarified in the Authority's decisions.
2.	Do you consider that the proposed Code amendment described in section 4.1 complies with section 32(1) of the Act, and with the Code amendment principles, and therefore should proceed?	Yes. See response to Q1 and cover letter for further details.
3.	Do you have any comments on the drafting of the proposed Code amendment described in section 4.1? (The drafting is included in Appendix B.)	No.

[9] As per the Authority's statements made in relation to current investigations into the distribution pricing related effects of evolving technologies. For further details see: http://www.ea.govt.nz/dmsdocument/20057.

	Question	Response
4.	Do you consider that the proposed Code amendment should come into force at a single date, or should it be phased in?	Meridian agrees that it is important to balance securing early benefits with timeframes that are manageable for implementation. Meridian therefore supports the phased approach the Authority has outlined. Meridian also supports consistent application of the changes to pre-existing and new assets. In installed capacity terms, DG accounts for around 14% of the system total and growth in DG since September 2013 accounts for only 6% of DG capacity pre-dating that time.[10] To limit the changes to newer (say, post-2013 investments) only will mean that significant inefficiencies will persist. Applying the changes uniformly to all assets as an approach is also consistent with general New Zealand regulatory practice. Meridian's submission on TPM reforms and accompanying NERA report provides further discussion on this.
5.	Is the proposed phasing of the Code amendment appropriate? (The phasing is discussed in section 4.3.). If not, what alternative phasing or dates would you propose and why?	Yes. Refer response to Q3.

[10] Calculated from EA 'Installed Distributed Generation' EMI data

	Question	Response
6.	If the proposal were to proceed, do you consider that there would be barriers that might prevent agreements being reached between Transpower and distributed generation owners to efficiently reduce or defer transmission network costs? If so, what are these barriers? Please consider both existing and proposed new distributed generation.	No. The process of Transpower and distributed generation owners reaching appropriate agreements can be facilitated by Transpower designing and developing simple approval process which, in Meridian's view, it is well placed to do. The variation in size and capacity (resourcing wise) of different DG owners and the specific needs of smaller DG owners will clearly need to be taken into consideration in the approval process design. In Meridian's view, targeted timeframes for consideration/approval should be published to assist with participation. To the extent there is any evidence of unwillingness on the part of Transpower to negotiate appropriate terms within reasonable timeframes, the Authority could at a later stage go on to consider the need for further measures such as a requirement for concluded agreements to be disclosed (to the fullest extent possible) and/or provision of a default 'benchmark agreement'.
7.	If the proposal were to proceed, do you consider that there would be barriers that might prevent agreements being reached between distributors and distributed generation owners to efficiently reduce or defer distribution network costs? If so, what are these barriers? Please consider both existing and proposed new distributed generation.	No. Such agreements would be facilitated by the Authority providing clear, 'user friendly' guidance to DG providers on details of how they can apply and clarifying expectations for distributors. As with the Transpower approval process, we suggest the operation of the processes is kept under review to ensure additional improvements can be made where required.

	Question	Response
8.	If the proposal were to proceed, do you consider that those distributors that were no longer able to recover the cost of making ACOT payments would cease making such payments?	We expect that many distributors will cease making ACOT payments as soon as they lose the ability to recover such amounts from consumers. Contractual amendments will be required to remove the ACOT payment mechanism. Meridian would expect these amendments to be relatively straightforward, with parties motivated to avoid an extended negotiation process.